



# **STRATEGIC HIGHWAY SAFETY PLANS: A CHAMPION'S GUIDE TO SAVING LIVES**

*Interim Guidance to Supplement SAFETEA-LU Requirements*

## **Preview Document**

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## PURPOSE OF GUIDANCE

A State Department of Transportation (DOT) developed Strategic Highway Safety Plan (SHSP) is a new Federal requirement of SAFETEA-LU, 23 USC 148, and is a major part of the core Highway Safety Improvement Program (HSIP). This preview document has two purposes:

- To promote best practices and serve as interim guidance to State DOTs and their safety partners for the development and implementation of the State SHSP.
- To assist State DOTs in creating an SHSP that meets the requirements of SAFETEA-LU with the ultimate goal of reducing the number of highway fatalities and serious injuries on all public roads.

*The purpose of this interim guidance in the format of this “Preview Document” is to provide the best available information in a timely manner. The US DOT is still analyzing and interpreting legislation and crafting additional guidance material to further enhance this guidance, particularly the sections on Implementing and Evaluating SHSPs. In addition, FHWA is developing guidance on the HSIP reporting requirements of Section 1401 of SAFETEA-LU.*

## TABLE OF CONTENTS

<b>PURPOSE OF GUIDANCE.....</b>	<b>i</b>
<b>INTRODUCTION.....</b>	<b>1</b>
Purpose of a Strategic Highway Safety Plan (SHSP) .....	1
Benefits of an SHSP.....	1
<b>DEVELOPING THE SHSP .....</b>	<b>2</b>
Gain Leadership Support and Initiative .....	2
Identify a Champion .....	3
Initiate the Development Process.....	3
Gather Data .....	4
Analyze Data.....	5
Establish a Working Group.....	5
Bring Safety Partners Together.....	6
Adopt a Strategic Goal.....	7
Identify Key Emphasis Areas .....	7
Form Task Groups .....	7
Identify Key Emphasis Area Performance Based Goals .....	8
Identify Strategies and Countermeasures.....	8
Determine Priorities for Implementation .....	9
Write the SHSP .....	9
<b>IMPLEMENTING THE SHSP .....</b>	<b>11</b>
Implementing the SHSP Through Existing Safety Plans.....	11
Implementing the SHSP Through Action Plans .....	11
Linking the SHSP with the Transportation Planning Process .....	12
<b>EVALUATING THE SHSP.....</b>	<b>13</b>
<b>APPROVAL .....</b>	<b>14</b>
<b>SHSP LEGISLATIVE COMPILATION .....</b>	<b>15</b>
<b>RESOURCES .....</b>	<b>18</b>

# INTRODUCTION

## **Purpose of a Strategic Highway Safety Plan (SHSP)**

The purpose of an SHSP is to identify the State's key safety needs and guide investment decisions to achieve significant reductions in highway fatalities and serious injuries on all public roads. The SHSP allows all highway safety programs in the State to work together in an effort to align and leverage its resources and positions the State and its safety partners to collectively address the State's safety challenges on all public roads.

An SHSP is a statewide-coordinated safety plan that provides a comprehensive framework, and specific goals and objectives, for reducing highway fatalities and serious injuries on all public roads. This statewide document, developed by the State DOT in a cooperative process, includes input from public and private safety stakeholders. The SHSP is a data-driven, four to five year comprehensive plan that integrates the four E's — engineering, education, enforcement and emergency medical services (EMS). The SHSP establishes statewide goals, objectives, and key emphasis areas developed in consultation with Federal, State, local, and private sector safety stakeholders.

## **Benefits of an SHSP**

Highway fatalities and serious injuries are at unacceptably high levels in the United States. The most important benefit of an SHSP is to coordinate statewide goals and safety programs to most effectively reduce highway fatalities and serious injuries on all public roads. The collaborative process of developing and implementing a State SHSP brings together and draws on the strengths and resources of all safety partners. An SHSP will help safety partners better leverage limited resources and work together to achieve common safety goals. Other benefits of an SHSP include:

- Establishing common statewide goals and priorities,
- Strengthening existing partnerships,
- Building new safety coalitions,
- Sharing data, knowledge, and resources,
- Avoiding redundant activities and leveraging existing resources such as funds, people, and leadership attention, toward common objectives,
- Communicating the impact of investing additional resources for highway safety countermeasures, and
- Incorporating both behavioral and infrastructure strategies and countermeasures to have a greater impact on reducing highway fatalities and serious injuries on all public roads.

## DEVELOPING THE SHSP

Provided below are suggested activities that may help create a process and identify milestones for the development of the SHSP. These are based on the requirements in SAFETEA-LU and best practices developed by States. This is not intended to be inclusive or prescriptive. All States have different needs and resources and have the flexibility to establish a process that best fits those needs and resources. Activities to consider in the development of an SHSP include:

- Gain Leadership Support and Initiative
- Identify a Champion
- Initiate the Development Process
- Gather Data
- Analyze Data
- Establish a Working Group
- Bring Safety Partners Together
- Adopt a Strategic Goal
- Identify Key Emphasis Areas
- Form Task Groups
- Identify Key Emphasis Area
- Performance Based Goals
- Identify Strategies and Countermeasures
- Determine Priorities for Implementation
- Write the SHSP

A more detailed explanation of each activity is provided below. These activities are not necessarily listed in a sequential order that all States will or should follow and some activities may be iterative in nature. **SAFETEA-LU requirements are in bold text.** Additional information and explanation, including best practices, are in regular font. A legislative compilation outlining all of the SHSP related SAFETEA-LU requirements is included in this guidance.

### **Gain Leadership Support and Initiative**

Leadership support from the State DOT CEO, State Commissioners, or other upper level leadership, is crucial throughout the SHSP development and implementation process. Leadership influences the policy direction, sets priorities for their agencies, and defines performance expectations for their staff. Leaders must persuade safety partners to take an aggressive and comprehensive approach to addressing safety. To expand leadership support, start with the safety partners who are committed to the concept of an SHSP. Encourage the leadership of those partners to contact their peers regarding the significance of this effort to marshal their support. Their endorsement of the SHSP should include encouraging staff to stay engaged and to build relationships across organizational boundaries and traditional areas of responsibility. Leadership support affects agencies or organizations internally by granting permission to dedicate time and resources for the effort, and holding those responsible for the development and implementation accountable.

Support must be sustained even after the plan is developed to ensure implementation and continued evaluation. Leadership must recognize that this is a long-term on-going process. This change in how safety partners conduct business, how they interact with each other, and how they

manage their own safety programs must be institutionalized for the SHSP to be effective over the long-term.

### **Identify a Champion**

Successful SHSP efforts call for at least one “champion”, an individual or a unit, to ensure all critical safety partners are integrated into a collaborative group. A safety champion helps to secure the necessary leadership, resources, visibility, buy-in, commitment, and shared goals of all partners. A safety champion can reside at any level within the organizational structure. Sometimes the champion is appointed by the DOT leadership or the leadership of the primary sponsoring agency just to initiate the activities. The safety champion will lead the working group that develops the SHSP and is responsible for maintaining the group’s cohesion, focus and effectiveness. The champion may either take on a part time/full time permanent role or transfer responsibilities to a new champion or small group of champions once the SHSP process is underway. The safety champion should sustain the group’s interest and momentum and clearly demonstrate the need for communication and coordination. Where relationships have not fully developed, the champion may need to make additional efforts to ensure commitment and participation from the full range of safety partners.

A champion is someone who can provide enthusiasm and support to accomplish the development of an SHSP. This person should have excellent interpersonal skills, be an expediter and have good organizational skills. This person must be credible and accountable.

### **Initiate the Development Process**

Starting the development of an SHSP should not be an overwhelming or arduous task. There are several approaches to initiate the process. For example, AASHTO developed the “Self-Assessment Tool” to judge a State’s current safety efforts. It is available at [www.safety.transportation.org](http://www.safety.transportation.org). Asking the following kinds of questions will help initiate the process: “What is the status of transportation safety in my State? What are the safety trends existing in my State? What is my vision of safety in my State five, ten, and twenty years from now?” These are some of the questions that, when answered, will help frame the discussion for all safety partners. Visioning and long term thinking will help a State determine what it wants to accomplish and move toward defining a strategic goal.

Other ways to start the development process is to:

- Reach out to peers in other States that have begun the development of an SHSP to learn from their experiences.
- Study other States’ SHSPs. How are they similar or how do they differ? Examples of existing Strategic/Comprehensive Highway Safety Plans that were created before the SAFETEA-LU requirements are available on-line. Some links to these plans are included within this guidance under the “RESOURCES” section.
- Become familiar with what has already been done within the State. **SAFETEA-LU requires States to consider the results of State, regional, or local transportation and highway safety planning processes.** Build your own process based on components from existing State plans and programs such as:

- the State Section 402 Highway Safety Plan and Annual Performance Plan (HSP)
- the annual Motor Carrier Safety Assistance Program (MCSAP) Commercial Vehicle Safety Plan (CVSP)
- the Traffic Records Coordinating Committee (TRCC) strategic plan for data improvement
- the Highway Safety Improvement Program (HSIP) (23 CFR 924).
- Become familiar with the transportation planning process. Understand what projects are eligible and how funding decisions are made. Refer to the FHWA/FTA Transportation Planning Capacity Building website (at <http://www.planning.dot.gov/> for more information on the planning process. Also, coordinate and consult with State and metropolitan transportation planners.
- Review existing literature, such as the AASHTO Strategic Highway Safety Plan, the Integrated Safety Management Process (NCHRP Report 501), and Safety Management Systems (NCHRP Synthesis 322).

### **Gather Data**

Data is a critical element in the development of an effective SHSP. The strength of the SHSP is in the State's ability to identify, analyze, prioritize, and evaluate reliable data. **SAFETEA-LU requires States to have in place a crash data system with the ability to perform safety problem identification and countermeasure analysis on all public roads. SAFETEA-LU also requires States to advance their capabilities for traffic records data collection, analysis, and integration with other sources of safety data** (e.g. state traffic record systems, input from police such as citations, input from emergency service providers and highway maintenance workers, motor carrier data, transit data, the FRA inventory of highway-railroad grade crossings, medical records, crash data research, public meetings, road inventories, driver records, etc.). States should strive to improve the timeliness, accuracy, completeness, uniformity, integration, and accessibility of the safety data needed to identify priorities for Federal, State, regional and local highway and traffic safety programs. That being said, States should not stop the SHSP development process to wait for better data systems. States should get started using the best data that is available and build upon it.

To advance States' data gathering capabilities, each State should develop an active partnership with an existing Traffic Records Coordinating Committee (TRCC). If the State does not currently have a TRCC, one should be established. TRCCs are responsible for identifying data system enhancement strategies that can affect access to data, as well as its accuracy and timeliness. As part of 23 USC 408, NHTSA provides grants to States with a TRCC and a strategic data improvement plan. Another opportunity available for States to assess their current data capabilities includes a Traffic Records Assessment conducted by NHTSA. Availability of complete and accurate crash data for all public roads may be a critical highway safety issue. Some States may identify the need to upgrade, improve, and standardize their traffic records information system as one of their key emphasis areas to ensure that future updates and changes to the SHSP are based on data that is complete and accurate.

## **Analyze Data**

Careful analysis of the best available data is needed to identify the critical highway safety problems and safety improvement opportunities for each State on all public roads. **SAFETEA-LU requires States to analyze and make effective use of State, regional, or local crash data.** Data include, but should not be limited to, vehicle, driver and pedestrian crash data, roadway and travel data, citation data, observational and opinion surveys, behavioral risk factor surveys, medical data including hospital discharge summaries, and other statewide databases. Through the data analysis process, each State should identify its highest priority safety program areas (e.g., pedestrians, intersections, roadway departure, occupant protection, impaired driving, distracted driving, aggressive driving). The AASHTO Strategic Highway Safety Plan outlines 22 key emphasis areas organized into six plan elements: drivers, special users, vehicles, highways, emergency medical services (EMS), and management. These key emphasis areas can serve as a starting point to evaluate State data. States should also consider key emphasis areas unique to their specific highway safety challenges, such as demographics (older and younger driver fatality trends), weather, and wildlife.

## **Establish a Working Group**

To facilitate a consultative and comprehensive approach to safety, States have found it beneficial to establish a working group to guide the development of the SHSP. The working group consists of representatives from various agencies across the engineering, education, enforcement and emergency medical services (EMS) disciplines.

**SAFETEA-LU requires State DOT's to develop and implement a strategic highway safety plan (SHSP) after consultation with:**

- **Highway safety representative of the governor of the State**
- **Regional transportation planning organizations and metropolitan planning organizations, if any**
- **Representatives of major modes of transportation**
- **State and local traffic enforcement officials**
- **Persons responsible for administering 23 USC Section 130 at the State level**
- **Representatives conducting Operation Lifesaver**
- **Representatives conducting a motor carrier safety program**
- **Motor Vehicle Administration agencies**
- **Other major State and local safety stakeholders**

The working group may build on existing coalitions and includes safety advocates from State, regional, local and Federal government, academia, and the private sector. Members of this group should be identified for their level of expertise and commitment to highway safety. At a minimum, include those stakeholders indicated in 23 USC 148 listed above. Participants can be appointed by leadership or invited to participate by the champion. Although State DOT transportation planners were not specifically mentioned in Section 148 of SAFTEA-LU, they should be involved along with the metropolitan and regional transportation planners. Likewise, given the high number of highway fatalities and serious injuries that occur on non-State roads, local and regional agencies should be invited and encouraged to participate.

Some working groups demonstrate their commitment to improving highway safety by developing a charter to facilitate communication between transportation professionals within each participating organization. The charter briefly describes the common goal of improved highway safety and emphasizes the commitment to work as a team to achieve a shared vision. A charter reminds members of their mission and goals, emphasizes the importance of each participant's contribution, helps the group remain focused, and can increase understanding and trust between agencies and organizations.

### **Bring Safety Partners Together**

The organizational structure of a State's agency and inter-agency working relationships are an important factor to consider when bringing safety partners together. Rather than create entirely new committees, build upon existing relationships, interagency working groups, and committees. Many States currently have functioning transportation safety committees such as Standing Committees on Highway Traffic Safety, TRCCs, and Transportation Safety Planning (TSP) Committees. Other States have revitalized past Safety Management Committees. Regardless of how safety partners are initially gathered to create an organizational structure for the development and implementation of the SHSP, look for ways to expand on the membership to include non-traditional partners with the intent of creating an integrated committee.

Convene a safety summit (or similar opportunity) to bring partners together. This could be a large initial meeting to kick off the development process, or it could be the initial convening of the working group. This is an opportunity to learn about each of the safety partners' priorities, what they can contribute, and recognize common goals. Give participants the opportunity to describe their safety concerns and current programs. This may advance into a discussion of critical safety issues and identification of leveraging opportunities. Finally, the summit is a forum to initiate the development of the SHSP and can help forge an agreement on how to proceed.

Several States have used Transportation Safety Planning (TSP) Forums or Safety Conscious Planning (SCP) Forums to convene working groups and educate partners on safety issues and potential solutions. These forums integrate safety into the transportation planning process by elevating emphasis on safety and creating dialogue on realistic action planning and problem solving strategies. The TSP Forums build on the success of earlier SCP Forums to include discussion of developing an SHSP, as well as, meeting the planning requirement to increase the safety of the transportation system for motorized and non-motorized users. TSP forums bring together key constituencies to better understand the transportation planning process and the safety planning process, to identify safety issues and problems, and to facilitate communication and consensus building towards solutions and strategies. These can then be incorporated into the State's SHSP. Furthermore, the SHSP can assist planners in integrating safety into the planning process.

Safety professionals are encouraged to participate in planning activities such as working groups, task forces and advisory committees that planners convene to update long-range plans, or the Transportation Improvement Programs/Statewide Transportation Improvement Programs

(TIPs/STIPs). Active involvement in the process can strengthen the partnership between planners and safety professionals and can provide safety professionals access to decision makers and resources beyond the traditional limited sources of safety funds.

### **Adopt a Strategic Goal**

**SAFETEA-LU requires each State to adopt strategic and performance goals that address traffic safety, including behavioral and infrastructure problems and opportunities, on all public roads. The goals must focus resources on areas of greatest need and be coordinated with other State highway safety programs.** A strategic goal can be developed by comparing the safety goals of participating agencies and agreeing on mutually acceptable goals. Another way is to review safety trends and forecast performance to identify a goal. Some State goals are linked to national goals, such as the joint AASHTO-DOT-GHSA-AAMVA safety goal to reduce the traffic fatality rate to 1.0 fatalities/HMVMT by 2008. Strategic goals are longer-term goals that usually span an extended time period. The strategic goal in a State's SHSP should align with the strategic goals in the State's other safety plans. Strategic goals often include a fatality rate in combination with a timeframe such as the joint safety goal. Some States may prefer to adopt a goal expressed with a total number or percentage reduction in highway fatalities and serious injuries in combination with a time frame. An example would be "reduce statewide roadway fatalities by 10% by 2008" or "lower highway fatalities to no more than 400 fatalities per year by 2010". The strategic and performance goals should be linked to the goals and objectives in the transportation planning process.

### **Identify Key Emphasis Areas**

Based on the data analysis completed earlier in the process, each State should identify its key emphasis areas (e.g., pedestrians, intersections, roadway departure, impaired driving, distracted driving, aggressive driving, commercial motor vehicles, motorcycles). The key emphasis areas should be developed with input from representatives of the 4 E's:

- Engineering
- Education
- Enforcement
- Emergency Medical Services (EMS)

The number of key emphasis areas selected should represent a balance of resources and priorities. Typically States identify between four and eight key emphasis areas.

### **Form Task Groups**

States should form task groups for each emphasis area and conduct further analyses of State safety data and develop action plans for each emphasis area that include detailed strategies, countermeasures and performance based goals. Keep in mind that reducing highway fatalities and serious injuries on all public roads is contingent upon a multi-agency collaborative effort. The task groups are usually comprised of representatives from various agencies and each of the "4E's". The benefits of participating in the task groups are that representatives can influence

what strategies are given the highest priority and how resources are allocated. Task group members should include technical specialists knowledgeable in the group's emphasis area and those whose safety program plans would be directly affected by the recommendations made by the task group.

### **Identify Key Emphasis Area Performance Based Goals**

The task groups set specific performance based goals for the key emphasis areas. Performance based goals are shorter-term goals that contribute toward achieving the strategic goal. Performance based goals are important in evaluating the attainability of the States' strategic goal. Performance based goals are needed to evaluate strategy/countermeasure effectiveness thus providing milestones and progress indicators throughout the implementation process. Performance based goals should be established with a specific time period. Current practice for many States is to set their performance based goals at yearly intervals measured over the life of the plan. Task groups should establish performance based goals related to current safety measures, conditions and activities to assess progress over the period of the SHSP. An example of a performance based goal would be "attain a 2% increase in seatbelt usage in the State each year to attain a 98% usage rate by 2008" or "reduce roadway departure fatalities each year and an overall reduction of 10% by 2010".

Along with the identification of performance goals, it is important to develop performance measures and indicators that will allow the State to monitor their progress. Interim targets or milestones are also useful tools in complying with the HSIP reporting requirements in SAFETEA-LU. Interim targets are specific to a particular strategy or strategies so that crash reductions can be tracked to the successful completion of the strategy. An example of this is a target of 20% reduction of cross median fatalities and serious injuries within 4 years. This performance target supports a broader goal of reducing roadway departure fatalities. The resulting reduction of cross median crashes can be correlated with a strategy such as the installation of a median barrier system. The task groups also monitor short and long-term successes to see that target goals are being achieved.

### **Identify Strategies and Countermeasures**

**SAFETEA-LU requires the State to develop an SHSP that describes a program of projects or strategies to reduce or eliminate safety hazards.** It is also important to point out that **SAFETEA-LU requires that the State develop an SHSP that identifies opportunities for preventing the development of such hazardous conditions.** As strategies and countermeasures are identified to address key emphasis areas, the following questions should be addressed: What are our priorities for a particular emphasis area? What strategies and resources are available to us for a particular emphasis area? What strategies lend themselves to cooperative efforts and how might we leverage various resources each partner brings to the table? What proactive approaches can be taken to address potentially hazardous locations and features on a system-wide basis? **SAFETEA-LU requires the State to develop an SHSP that addresses engineering, management, operation, education, enforcement, and emergency services elements (including integrated, interoperable emergency communications) of highway safety as key factors in evaluating highway projects.** High priority should be given

to those strategies that could significantly reduce highway fatalities and serious injuries in the key emphasis areas. Low-cost and achievable countermeasures should also be given a high priority. For information on countermeasures and strategies, consult the NCHRP 500 Series Guidance Documents, available at [www.safety.transportation.org](http://www.safety.transportation.org). Another valuable resource is a new guidebook developed by GHSA for NHTSA titled *Countermeasures that Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices*. This guidebook offers countermeasures for NHTSA's priority areas. Reducing the number of highway fatalities and serious injuries often requires continuing and/or strengthening current programs, as well as, implementing new strategies. Both strategies and countermeasures are measured and monitored for effectiveness and may continue to be fine-tuned as the implementation process unfolds.

### **Determine Priorities for Implementation**

**SAFETEA-LU requires States to determine priorities for the correction of hazardous road locations, sections, and elements (including railway-highway crossing improvements) as identified through crash data analysis.** All strategies and countermeasures identified for each key emphasis area must be considered when identifying priorities for implementation. This prioritization includes the behavioral, infrastructure, and other safety strategies and countermeasures identified in the process of developing emphasis area performance goals and targets. The priorities should consider proactive, as well as, reactive measures to address current and potential hazards on all public roads. **SAFETEA-LU requires the State to consider the safety needs of, and high fatality segments of public roads. SAFETEA-LU requires the State to develop an SHSP that identifies hazardous locations, sections, and elements (including roadside obstacles, railway-highway crossing needs, and unmarked or poorly marked roads) that constitute a danger to motorists (including motorcyclists), bicyclists, pedestrians, and other highway users. SAFETEA-LU requires the State to develop an SHSP that establishes the relative severity of those locations, in terms of accidents, injuries, deaths, traffic volume levels, and other relevant data.** At a minimum, factors/criteria to consider in setting priorities include the potential reduction in highway fatalities and serious injuries on all public roads, the costs of projects and programs and the resources available, as well as, other criteria as determined by the working group.

### **Write the SHSP**

How the plan is structured and what it contains will start to emerge during the SHSP development process. While the State DOT is ultimately accountable for the development and implementation of the SHSP, the safety partners should be in agreement with the plan and its components. Overall, the SHSP should clearly and concisely describe the State's safety problem and describe a program of priorities or strategies to prevent, reduce or eliminate hazardous conditions.

A number of States have included the following information in their SHSP: a listing of safety partners; mission, vision and goal statements; key emphasis areas and background information on challenges and past or on-going efforts; performance goals and measures; implementation strategies and processes; and evaluation processes and analyses. SHSPs should be considered dynamic documents and the goals, strategies and countermeasures may be adjusted based on

monitoring the achievement of performance goals. Because of its dynamic nature, the SHSP should be written in a format that will allow it to be updated easily. Many strategic and/or comprehensive highway safety plans were developed prior to the new SAFETEA-LU requirements. Example plans that currently exist are available on-line. Links to these plans can be found the Resources section of this guidance and on the web at [www.safety.transportation.org](http://www.safety.transportation.org).

## **IMPLEMENTING THE SHSP**

**SAFETEA-LU requires States to develop and implement an SHSP by October 1, 2006 in order to obligate funds for Section 148 (HSIP) eligible activities.** States that have SHSPs that meet the requirements of SAFETEA-LU may obligate funds for Section 148 eligible activities.

**SAFETEA-LU requires that until a State develops and implements an SHSP, the State may only obligate Section 148 funds for projects that were previously eligible under Sections 130 and 152.** Thus in the absence of an approved SHSP, the provisions of Sections 130 and 152, as well as 23 CFR 924 still apply in obligations of Section 148 funds.

In addition, if a State has not developed an SHSP by October 1, 2007 (fiscal year 2008), apportionment under Section 148 will be “frozen” at the fiscal year 2007 level for that and all subsequent years until an SHSP is developed and approved. If a State that does not have an SHSP in place it will not be able to use up to 10% of its HSIP funds for other safety projects that would be allowed under Section 148.

### **Implementing the SHSP Through Existing Safety Plans**

The SHSP’s success is dependent on a collaborative effort. The SHSP is intended to provide a guiding direction for all of the State’s safety partners in addressing key highway safety issues and to align their highway safety efforts. By definition, an SHSP considers the results of State, regional or local transportation and safety planning processes. As a result, the strategies and projects included in the annual Motor Carrier Safety Assistance Program Commercial/Vehicle Safety Plan (per 49 CFR 350); the State Section 402 Highway Safety Plan and Annual Performance Plan (per 23 CFR 1200); the Highway Safety Improvement Program (per 23 CFR 924); and metropolitan and statewide long range transportation plans will be considered and appropriately included in the initial development of a State’s SHSP.

In the future, as the development process of the SHSP evolves and the collaborative efforts of the working group become institutionalized, the recommendations from the SHSP should influence the priorities in the above mentioned plans. The SHSP is not intended to replace these plans. The benefit of the over-arching nature of the SHSP is that it is the result of a collaborative effort. Current safety plans and processes like those mentioned in this section will remain stand-alone planning documents for current existing safety programs.

A multitude of funding sources should be used to implement both the infrastructure and behavioral strategies and programs agreed upon in the SHSP, including funding sources associated with FMSCA, NHTSA, and FHWA. That is why programs or strategies implemented with these funding sources must be included in their respective plans. These plans are mechanisms for implementation of the SHSP.

### **Implementing the SHSP Through Action Plans**

Some States have developed action plans for each of their State’s key emphasis areas. These implementation plans outline the strategies and project priorities that ensure the most effective

use of resources. They may also include evaluation criteria for assessing the success of the implemented safety strategies. **SAFETEA-LU requires each State to establish and implement a schedule of highway safety improvement projects and strategies for hazard correction and hazard prevention.** The schedule should list agencies and other parties responsible for implementation. It should also document funding sources and other resource commitments.

### **Linking the SHSP with the Transportation Planning Process**

An SHSP shares similar goals with the transportation planning process: to increase State and local decision makers' awareness of safety needs, to improve the effectiveness of planning and programming through the use of accurate and timely data, and to expand the participation of major State and local stakeholders. State and local DOTs and MPOs are required to consider safety as a factor in the transportation planning process. Both SHSP and SCP take a comprehensive approach to safety that includes engineering, education, enforcement and EMS. Both need a broad coalition of safety and planning partners to succeed.

**SAFETEA-LU requires that the State develop an SHSP that is consistent with the requirements of Section 135(g).** Incorporating the appropriate elements of the SHSP throughout the stages of the transportation planning process gives the SHSPs higher visibility and greater understanding among stakeholders, elected and appointed officials, and the public. It ensures that the appropriate SHSP initiatives are incorporated into the planning and policy documents of State DOTs and MPOs (i.e. transportation plans and corridor plans), into the program of projects in the Transportation Improvement Programs/Statewide Transportation Improvement Programs (TIPs/STIPs), and eligible for federal-aid transportation funding. Planners may need cost estimates for individual large safety projects listed separately in the TIP/STIP.

For most categories of transportation projects, FHWA/FTA funds cannot be used unless the project is included on a fiscally-constrained TIP/STIP. Reasonably available or committed revenue sources must be identified to match the estimated costs of the strategies included in the TIP/STIP. In air quality maintenance and non-attainment areas, the TIP/STIP and long-range plan must also demonstrate conformity with the regions' air quality implementation plan. It is advisable to coordinate with transportation planners to ensure that all factors and requirements are considered and addressed to include appropriate projects and strategies in the TIP/STIP.

It is important to note, however, that the transportation planning process (i.e. transportation plan, TIP, and STIP) applies only to federal-aid highway and transit programs. Other plans such as the CVSP and the HSP remain stand-alone planning documents. As previously mentioned, SHSPs should be coordinated with these plans as well.

## EVALUATING THE SHSP

**SAFETEA-LU requires each State to establish an evaluation process to analyze and assess results achieved by highway safety improvement projects carried out in accordance with procedures and criteria established in 23 USC 148. SAFETEA-LU requires States to use the evaluation information in setting priorities for highway safety improvement projects. SAFETEA-LU requires States to evaluate the plan on a regular basis to ensure the accuracy of the data and priority of proposed improvements.** The performance-based elements in the SHSP process should help States determine the effectiveness of highway safety improvement projects in reducing the number of highway fatalities and serious injuries on all public roads. The evaluation process should capture these results and feed them back into the planning process for consideration when revisiting priorities included in the SHSP. The State's evaluation process should evaluate the plan on an annual basis to ensure the accuracy of the data, priority of proposed improvements and effectiveness of the projects and plan. The working group should meet periodically to review the SHSP, examine progress toward goals, and suggest changes or modifications. The leadership of participating safety partners should be briefed periodically on the activities of the working group, effectiveness of the plan, and recommendations for modifications.

## **APPROVAL**

**SAFETEA-LU requires that the SHSP be approved by the Governor of the State or a responsible State agency.** As part of FHWA's oversight and stewardship responsibilities, 23 CFR 924 requires components of the Highway Safety Improvement Program be comprised of processes developed by the States and approved by the FHWA. Given this requirement, FHWA Division Administrators will ensure that the State has followed a process that is consistent with the requirements outlined in Sections 148 (a)(6) and 148(c). This guidance document has incorporated all of these requirements , as well as, best practices to facilitate this compliance.

## **SHSP LEGISLATIVE COMPILATION**

### **23 USC 148 Requirements**

The purpose of this legislative compilation is to offer an easy quick reference. The major safety features of the bill as it relates to the State Strategic Highway Safety Plan (SHSP) are as follows:

#### **SECTION 148(a) Definition**

SAFETEA-LU requires State DOT's to develop and implement a strategic highway safety plan (SHSP) *after* consultation with:

- Highway safety representative of the governor of the State
- Regional transportation planning organization and metropolitan planning organizations, if any
- Representatives of major modes of transportation
- State and local traffic enforcement officials
- Persons responsible for administering Section 130 at the State level
- Representatives conducting Operation Lifesaver
- Representatives conducting a motor carrier safety program
- Motor Vehicle Administration agencies
- Other major State and local safety stakeholders

By definition an SHSP:

- Analyzes and makes use of State, regional or local crash data.
- Addresses engineering, management, operation, education, enforcement, and emergency medical services (EMS) elements (including integrated, interoperable emergency communications) of highway safety as key factors in evaluating highway safety projects.
- Considers safety needs of, and high fatality segments of, public roads.
- Considers the results of State, regional, or local transportation and highway safety planning processes.
- Describes a program of projects or strategies to reduce or eliminate safety hazards.
- Is approved by the Governor of the State or a responsible State Agency.
- Is consistent with the requirements of Section 135(g).

#### **SECTION 148(c) Eligibility**

To obligate funds apportioned under Section 104(b)(5) [Highway Safety Improvement Program] a State shall have in effect a State Highway Safety Improvement Program under which the State:

- Develops and implements a State strategic highway safety plan that identifies and analyzes highway safety problems and opportunities. This plan should be evaluated on a regular basis to ensure the accuracy of the data and the priority of the proposed improvements. As part of the State SHSP, a State shall:

- Have in place a crash data system with the ability to perform safety problem identification and countermeasure analysis.
- Based on the above analysis:
  - Identify hazardous locations, sections and elements (including roadside obstacles, railway-highway crossing needs, and unmarked or poorly marked roads) that constitute a danger to motorists (including motorcyclists), bicyclists, pedestrians and other highway users,
  - Using such criteria as the State deems appropriate, establish the relative severity of those locations, in terms of accidents, injuries, deaths, traffic volume levels, and other relevant data,
- Adopt strategic and performance based goals that:
  - Address traffic safety, including behavioral and infrastructure problems and opportunities on all public roads,
  - Focus resources on areas of greatest need,
  - Coordinate with other State highway safety programs.
- Advance State capabilities for traffic records data collection, analysis, and integration with other sources of safety data (such as road inventories) in a manner that:
  - Complements the State highway safety program and the commercial vehicle safety plan;
  - Includes all public roads;
  - Identifies hazardous locations, sections, and elements on public roads that constitute a danger to motorists (including motorcyclists), bicyclists, pedestrians, and other highway users; and
  - Includes a means of identifying the relative severity of hazardous locations described in terms of accidents, injuries, deaths, and traffic volume levels;
- - Determine priorities for the correction of hazardous road locations, sections, and elements (including railway-highway crossing improvements), as identified through crash data analysis;
  - Identify opportunities for preventing the development of such hazardous conditions; and
  - Establish and implement a schedule of highway safety improvement projects for hazard correction and hazard prevention; and
- - Establish an evaluation process to analyze and assess results achieved by highway safety improvement projects carried out in accordance with procedures and criteria established by this section; and
  - Use the information in setting priorities for highway safety improvement projects.

A State shall evaluate the plan on a regular basis to ensure the accuracy of the data and priority of proposed improvements.

## **SECTION 148(e) Flexible funding for States with a Strategic Highway Safety Plan**

To further the implementation of a State strategic highway safety plan, a State may use up to 10 percent of the amount of funds apportioned under the Highway Safety Improvement Program for a fiscal year to carry out safety projects under any other Section as provided in the SHSP if the State certifies that:

- It has met needs in the State relating to the rail highway grade crossings; and
- It has met the State's infrastructure safety needs relating to highway safety improvement projects.

Nothing in the requirements for the SHSP requires a State to revise any State process, plan, or program in effect on the date of enactment of this Section.

### **Transitional Period:**

An approved plan must be completed by October 1, 2006. Until a State develops and implements an SHSP, States' may obligate funds under Section 148 for projects that were eligible for funding under Sections 130 and 152 of that title.

If a State has not developed a strategic highway safety plan by October 1, 2007, the State shall receive for the highway safety improvement program for each subsequent fiscal year until the date of development of such plan an amount that equals the amount apportioned to the State for that program for fiscal year 2007.

## RESOURCES

American Association of State Highway transportation Officials (AASHTO)  
<http://safety.transportation.org/>

American Association of State Highway transportation Officials (AASHTO) “Self Assessment Tool” <http://safety.transportation.org/assessment.aspx>

American Association of State Highway transportation Officials (AASHTO) “Elements of a Safety Plan” <http://safety.transportation.org/elements.aspx>

Federal Highway Administration – Office of Safety, <http://safety.fhwa.dot.gov/>

Federal Highway Administration – Office of Safety, “HSIP Manual”  
<http://www.fhwa.dot.gov/tfhrc/safety/pubs/81218/intro.htm>

Federal Highway Administration - “Considering Safety In the Transportation Planning Process”  
<http://tmip.fhwa.dot.gov/clearinghouse/docs/safety/>

Federal Highway Administration/Federal Transit Administration - "Transportation Planning Capacity Building"  
<http://www.planning.dot.gov/>

Federal Highway Administration - "Proactive Approach to Safety Planning" (Article)  
<http://www.tfhrc.gov/pubrds/03may/02.htm>

National Highway Traffic Safety Administration - “Countermeasures that Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices”  
(Web link not available yet)

Federal Railroad Administration – “Secretary’s Action Plan, Highway-Rail Crossing Safety and Trespass Prevention, June 2004”  
[http://www.fra.dot.gov/downloads/safety/action\\_plan\\_2004.pdf](http://www.fra.dot.gov/downloads/safety/action_plan_2004.pdf)

Federal Transit Administration – TRIS Database  
<http://trisonline.bts.gov>

Institute of Transportation Engineers, ITE, “The Traffic Safety Toolbox” <http://www.ite.org/>

National Cooperative Highway Research Program (NCHRP) Report 500 “Implementing AASHTO’s Strategic Highway Safety Plan” <http://safety.transportation.org/guides.aspx>

National Cooperative Highway Research Program (NCHRP) Report 501 “Integrated Safety Management Process” [http://trb.org/publications/nchrp/nchrp\\_rpt\\_501.pdf](http://trb.org/publications/nchrp/nchrp_rpt_501.pdf)

National Cooperative Highway Research Program (NCHRP) Project 17-18 “Guidance for Implementation of the AASHTO Strategic Highway Safety Plan”

<http://www4.trb.org/trb/crp.nsf/>

Some examples of currently existing Strategic and/or Comprehensive Highway Safety Plans are available on-line:

*(These plans were developed prior to SAFETEA-LU requirements)*

Alabama	<a href="http://utca.eng.ua.edu/projects/final_reports/04404fml.pdf">http://utca.eng.ua.edu/projects/final_reports/04404fml.pdf</a>
Florida	<a href="http://www.dot.state.fl.us/safety/TransSafEng/strategicplandocs">http://www.dot.state.fl.us/safety/TransSafEng/strategicplandocs</a>
Georgia	<a href="http://www.dot.state.ga.us/dot/operations/traffic-safety-design/Documents/PDF/SAPIntro.pdf">http://www.dot.state.ga.us/dot/operations/traffic-safety-design/Documents/PDF/SAPIntro.pdf</a>
Illinois	<a href="http://www.dot.state.il.us/illinoisCHSP/pdf/illinoischsp.pdf">http://www.dot.state.il.us/illinoisCHSP/pdf/illinoischsp.pdf</a>
Iowa	<a href="http://www.iowasms.org/strategic_highway_safety_plan_draft.htm">http://www.iowasms.org/strategic_highway_safety_plan_draft.htm</a>
Maine	<a href="http://www.themtsc.org/databook/mtsc_databook_complete.pdf">http://www.themtsc.org/databook/mtsc_databook_complete.pdf</a>
Maryland	<a href="http://www.sha.state.md.us/safety/oost/strategichwyplan.asp">http://www.sha.state.md.us/safety/oost/strategichwyplan.asp</a>
Michigan	<a href="http://www.michigan.gov/documents/MI_CHSP_110103_7.pdf">http://www.michigan.gov/documents/MI_CHSP_110103_7.pdf</a>
Minnesota	<a href="http://www.dot.state.mn.us/trafficeng/safety/chsp/CHSP%20Report%20-%20June2005.pdf">http://www.dot.state.mn.us/trafficeng/safety/chsp/CHSP%20Report%20-%20June2005.pdf</a>
Missouri	<a href="http://www.savemolives.com/pdf/Missouri%20Blueprint%20for%20Safer%20Roadways.pdf">http://www.savemolives.com/pdf/Missouri%20Blueprint%20for%20Safer%20Roadways.pdf</a>
North Carolina	<a href="http://www.doh.dot.state.nc.us/preconstruct/traffic/safety/reports/CurrentProjects/Exec/orgstructure.pdf">http://www.doh.dot.state.nc.us/preconstruct/traffic/safety/reports/CurrentProjects/Exec/orgstructure.pdf</a> <a href="http://www.doh.dot.state.nc.us/preconstruct/traffic/conference/reports/tsaf3.pdf">http://www.doh.dot.state.nc.us/preconstruct/traffic/conference/reports/tsaf3.pdf</a>
Tennessee	<a href="http://www.tdot.state.tn.us/Chief_Engineer/assistant_engineer_operations/maintenance/IncidentManagement/TNStrategicHwySafetyPlan.pdf">http://www.tdot.state.tn.us/Chief_Engineer/assistant_engineer_operations/maintenance/IncidentManagement/TNStrategicHwySafetyPlan.pdf</a>
Washington	<a href="http://www.wsdot.wa.gov/biz/trafficoperations/pdf/targetzero.pdf">http://www.wsdot.wa.gov/biz/trafficoperations/pdf/targetzero.pdf</a>